

# **Addendum to AST-5250 Emulation Program Enhancements Supplement**

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000682-002 A  
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# AST-5250 Emulation Program Enhancements Supplement Addendum

This addendum corrects and adds information to your *AST-5250 Emulation Program Enhancements Supplement*. Please replace the original pages with the updated pages from this addendum as follows:

## Original Pages

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Title page  
iii - iv  
1 - 2  
29

## Updated Pages

FCC Warning  
Title page  
iii - iv  
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## **FCC WARNING**

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.



**AST-5250 Emulation Program**  
**Enhancements**

**Supplement**  
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# INTRODUCTION

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This manual supplements the user's manual in your AST-5250 terminal emulation package. It provides additional information on configuring and operating your AST-5250 product.

Personal computer (PC) is used throughout as a generic term for IBM® PC, Personal System/2® (PS/2®), and AST-Premium® Workstation.

The following features have been added to the AST-5250 product line:

- *Application Presentation Services (APS) Window Manager Support*: Provides concurrent window sessions. All visible emulation sessions are continuously updated.
- *AST Keyboard Utility (ASTKBD)*: Conserves disk space by compressing all related keyboard files into one file with a .CMP extension. With this utility, you can support multiple countries and keyboard styles, and display all menu options in the language of your choice.
- *122-Key Keyboard Support*: Enables you to use a 122-key (3180) keyboard.

- **IBM Application Program Interface (API) Support:** Enables you to support multiple sessions using IBM API.
- **Enhanced Graphics Adapter (EGA) Support:** Gives you column separators; provides graphic screen restoration during hot-key with EGA video adapter.
- **Video Graphics Array (VGA):** Gives you column separators; provides graphic screen restoration during hot-key with VGA video adapter.
- **IBM 3180 Support:** For locally attached communications systems, supports all IBM 3180 attributes. With the AST Preview I/O™ display adapter, provides capability for a wide screen (27 lines by 132 columns).
- **Splice Box for Connecting IBM or Black Box® Equipment:** With twisted-pair cabling, eliminates the need for IBM's 96X6187 Telephone Twisted-Pair Adapter (TTPA) and Black Box's IC008 interface adapter.

*Async Dial-up, Cluster and Gateway only:*

- **Local Echo:** Displays what you enter at the keyboard before the scan code is transmitted to the host system.

*Cluster and Async Dial-up only:*

- **Encryption Keys:** Provides a high level of security when data is being transmitted.
- **Terminal Support:** Provides terminal support for IBM 3151, Digital Equipment Corporation VT-100™, and compatibles.

The above features are described at length on following pages.

AST's Splice Box™ is a multifunctional media attachment box that allows connection to either standard 100-ohm twinaxial cable or cable complying with IBM type 3 twisted-pair cabling specifications.

To use the Splice Box with twinaxial cable, refer to your AST-5250 user's manual.

To use the Splice Box with twisted-pair cabling, follow the instructions in Section 4.2 or 4.3. Section 4.2 explains how to use the box with IBM's 5299 equipment. Section 4.3 explains how to use the box with Black Box Corporation's connectivity hardware.

### 4.1 AST-Splice Box Wiring

Figure 4-1 illustrates the relationship between the Splice Box and twinax cable connections. Notice that connections are made to pins 2 through 5. Pins 2 and 5 provide compatibility with IBM hardware, and pins 3 and 4 provide compatibility with Black Box hardware.

#### CAUTION

Before wiring into an IBM environment, make sure that no physical connection exists at the jack plugged into the Splice Box for pins 3 and 4. Failure to observe this warning can damage your phone equipment or AST-5251/11 terminal emulation products.

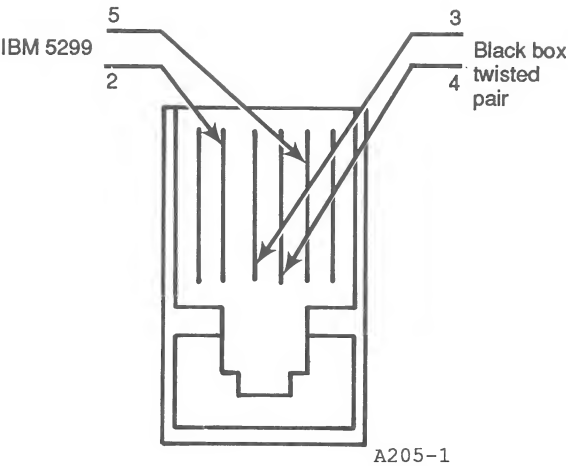


Figure 4-1. AST-Splice Box RJ11 Wiring.

## 4.2 Installing Your Splice Box in an IBM Environment

AST's Splice Box is completely compatible with IBM's 5299 Multiconnector Model 3.

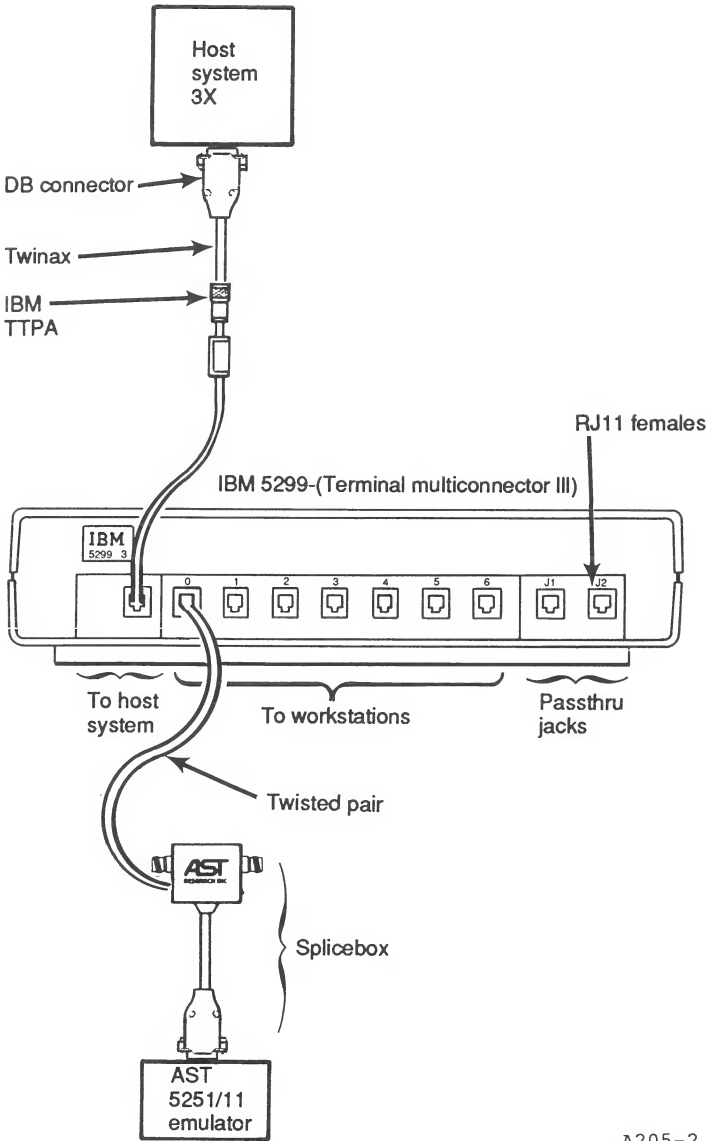
Before installing the Splice Box, check to ensure that the environmental requirements specified in your IBM hardware installation guide have been met.

If so, connect an IBM Telephone Twisted-Pair Adapter (TTPA) model 69X7883 between your 3X host computer and IBM 5299 box host input.

Next, at each PC terminal emulator where an AST-5251/11 terminal emulation product is being used, connect the PC to the 5299 using a Splice Box. Make sure that no physical connection exists at the jack plugged into the Splice Box for pins 3 and 4. Also, make sure that you observe the distance limitations imposed by IBM.

Exercise care when crimping the Splice Box RJ11 connectors. The wires are fragile.

If you mix equipment (or if you are using non-AST products), use IBM's 96X6187 TTPAs for making the connections between the equipment and the 5299. Figure 4-2 illustrates a typical installation using IBM's 5299 controller and AST's Splice Box.



A205-2.

Figure 4-2. AST-Splice Box and IBM 5299  
Controller -- Typical Installation.



### 4.3 Installing Your Splice Box in a Black Box Environment

AST's Splice Box is compatible with the following Black Box Corporation twinax-to-twisted pair connectivity hardware:

- IC008 -- twinax-to-twisted pair/RJ11 interface converter
- IC024 -- multiple twinax booster

If you mix equipment (or if you are using non-AST products), use an IC008 with the non-AST hardware. Refer to Figure 4-3 for a simplified illustration.

With AST's 5251/11 products, you can use the Splice Box as a replacement at the terminal equipment end for the IC008 interface adapter. You should still use an IC008 to make the connection between your Splice Box and the System/3x host computer.

Figure 4-4 shows a typical configuration using Black Box's Multiple Twinax Booster (the IC024).

#### WARNING

The Black Box booster (IC024) expects a weak signal (typically delivered from a distance of 500-1000 feet). If your connection is significantly closer than 500 feet, you may need to add resistance to reduce incoming voltage.

For additional information on installing and using the Splice Box with Black Box hardware, refer to the appropriate Black Box installation manual and the "Notes" supplied with your Black Box hardware.

#### NOTE

Exercise care when crimping Splice Box RJ11 connectors. The wires are fragile.

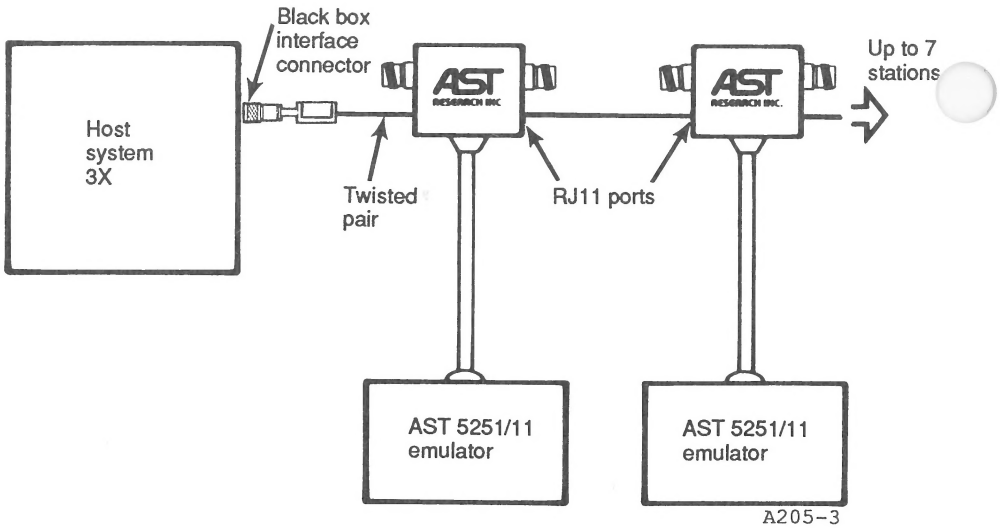
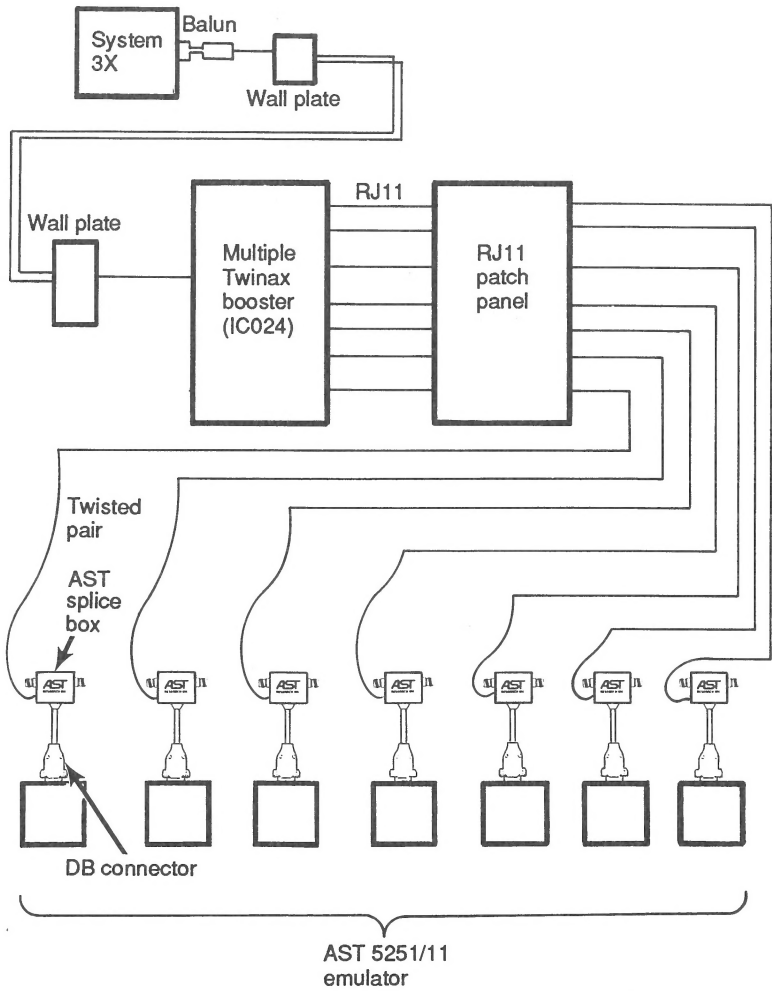


Figure 4-3. AST-Splice Box in Typical Installation Using IC008 Equipment.



A205-4

**Figure 4-4. AST-Splice Box in Typical Configuration Using Black Box's Multiple Twinax Booster (the IC024).**

## Related Documentation

In addition to the *AST-5250 User's Manual* in your terminal emulation package, you may want to refer to the following manuals:

*IBM's Twinaxial-Twisted Pair/RJ-11 Interface Converter*

*Black Box Corporation's Multiple Twinax Booster*

*IBM 5299 Terminal Multiconnector Model 3*